

Title (en)

METHOD FOR DEFINING A PROHIBITED VOLUME FOR A SURGICAL ROBOTIC SYSTEM

Title (de)

VERFAHREN ZUR DEFINITION EINES VERBOTENEN VOLUMENS FÜR EIN CHIRURGISCHES ROBOTISCHES SYSTEM

Title (fr)

PROCÉDÉ POUR DÉFINIR UN VOLUME INTERDIT POUR UN INSTRUMENT CHIRURGICAL ROBOTIQUE

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Application

EP 21306401 A 20211006

Priority

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Abstract (en)

The invention relates to a method for determining a prohibited volume for a surgical robotic system comprising a control unit, a robotic arm (102) and an end-effector (105) adapted to treat a region of interest of a patient's body, comprising:- implementing a first path of a motorized C-arm (403) supporting an X-ray source (401), an X-ray image detector (402) and an anti-collision device (404), said first path comprising at least two different angular positions around a rotation axis of the C-arm;- at each angular position of the C-arm along said first path, detecting with the anti-collision device an external surface of the patient's body and recording volumetric data of a patient's body portion enclosing the region of interest;- computing a volumetric model of the patient's body portion based on said volumetric data;- sending the volumetric model to the control unit of the surgical robotic system,- based on said volumetric model, defining a prohibited volume (V1, V2, V3) for the robotic arm and end-effector.

IPC 8 full level

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Citation (applicant)

WO 2017064287 A1 20170420 - SURGIVISIO [FR]

Citation (search report)

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